



DNA encoding Ste20 oxidant stress response kinase protein - useful  
 to develop products to treat, e.g. inflammatory response, cancer,  
 atherosclerosis, transplant rejection or viral infection  
 Claim 3; Fig 1; 48pp; English.  
 This protein comprises human SOK-1, a novel member of the Sps1  
 family of Ste20 homologues. SOK-1 (Ste20 oxidant stress response  
 kinase 1) has protein kinase activity, activates the transcription  
 factor NFkappaB and induces cell cycle arrest. It is activated  
 by depletion of intracellular ATP stores, an important component  
 of ischaemia, and is also activated by oxidant stress. SOK-1 is  
 positively regulated by phosphorylation, and is negatively  
 regulated by its noncatalytic C-terminal region. The amino acid  
 sequence of SOK-1 was deduced from a cDNA clone (see AAT97341)  
 obtained from a human B cell cDNA library. SOK-1 polynucleotides,  
 polypeptides, kinase inactive SOK mutants, biologically active  
 fragments of SOK-1 and antibodies that specifically bind SOK are  
 claimed. They can be used to treat conditions associated with a  
 proliferative response, e.g. inflammatory response, cancer,  
 atherosclerosis or balloon angioplasty induced injury to blood  
 vessels, and pathological conditions associated with NFkappaB  
 expression, e.g. transplant rejection, post ischemic injury and  
 the response to viral infection. The products can also be used  
 for detection, diagnosis and transgenic animal production.  
 Sequence 426 AA:

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